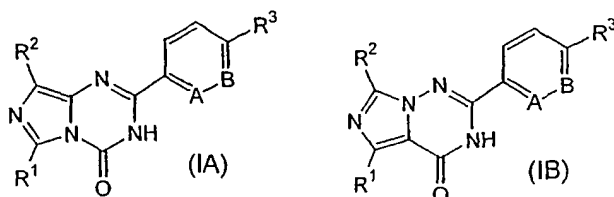


CLAIMS

1. An imidazotriazinone compound represented by the following formula (IA) or (IB):



wherein

A is N or CR⁴;

B is N or CH;

R¹ is substituted or unsubstituted cycloalkyl group or tert-butyl group;

R² is a hydrogen atom or C₁-C₆ alkyl group;

R³ is a hydrogen atom; nitro group; cyano group; a halogen atom; heteroaryl group; substituted or unsubstituted C₁-C₆ alkyl group; substituted or unsubstituted C₂-C₆ alkenyl group; saturated or unsaturated heterocycloalkyl group which is substituted or unsubstituted; a group: -NR⁵R⁶, -C(O)R⁷, -SO₂R⁷, -OR⁸, -NR⁸COR⁷, -NR⁸SO₂R⁷;

R⁴ is a hydrogen atom or C₁-C₃ alkoxy group which is unsubstituted or substituted by one or more fluorine atom(s);

R⁵ and R⁶ are, same or different from each other, a hydrogen atom; substituted or unsubstituted C₁-C₆ alkyl group; substituted or unsubstituted acyl group; or substituted or unsubstituted heterocycloalkyl group;

R⁷ is a hydrogen atom; substituted or unsubstituted C₁-C₆ alkyl group; substituted or unsubstituted heterocycloalkyl group; OH; -OR⁸ or -NR⁵R⁶;

R⁸ is a hydrogen atom, substituted or unsubstituted C₁-C₆ alkyl group; or substituted or unsubstituted heterocycloalkyl group; or pharmaceutically acceptable salts or solvates thereof.

2. The compound represented by the formula (IA) according to claim 1.

3. The compound represented by the formula (IB) according to

claim 1.

4. The compound according to claim 1, 2 or 3, in which R¹ is substituted or unsubstituted C₃-C₈ cycloalkyl group.

5 5. The compound according to claim 4, in which R¹ is selected from the group consisting of cyclopentyl, cyclohexyl and cycloheptyl .

6. The compound according to any one of claims 1 to 5, in which A is CR⁴ wherein R⁴ is methoxy or ethoxy group.

7. The compound according to any one of claims 1 to 6, in which B is CH.

10 8. The compound according to any one of claims 1 to 7, in which R² is methyl group.

9. The compound according to any one of claims 1 to 8, in which R³ is a hydrogen atom; a halogen atom; saturated or unsaturated heterocycloalkyl group; group selected from the -NR⁵R⁶, -C(O)R⁷, and -SO₂R⁷,
15 wherein R⁷ is OH, -OR⁸, -NR⁵R⁶ and substituted or unsubstituted heterocycloalkyl group.

10. A pharmaceutical composition containing a compound according to any one of claims 1 to 9, or pharmaceutically acceptable salts or solvates thereof as active ingredient.

20 11. A PDE 7 inhibitor containing a compound according to any one of claims 1 to 9, or pharmaceutically acceptable salts or solvates thereof as active ingredient.